

n is four;

R_4 is a naturally occurring amino acid or carbohydrate-moiety attached by an oxygen atom to the chiral carbon atom C^* by an ester linkage, $-O-X-(R_7)_2$ or $-O-X-(R_5)_m$; m being two or three and X being selected from the group consisting of C, P or S; wherein $[R_5]$ R_7 is a member independently selected from the group consisting of Group Q, hydrogen, and dimethylamino, wherein when one R_7 is dimethylamino, the other R_7 is =O, n is 4, X is C and R_2 and R_3 are both methyl, and wherein R_5 is a member independently selected from Group Q, and

Group Q consists of:

[hydrogen atom, wherein no more than two R_5 s are hydrogen;]
hydroxyl group;

=O;

[dimethylamino;]

substituted or unsubstituted $C_{(3-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxy, $C_{(1-10)}$ oxoalkyl, [or $C_{(1-10)}$ acetoxyalkyl], $C_{(1-10)}$ carboxyalkyl, $C_{(1-10)}$ hydroxyalkyl, or substituted $C_{(1-2)}$ alkyl group;

$-OR_6$, R_6 being a substituted or unsubstituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, or $C_{(1-10)}$ oxoalkyl;

substituted or unsubstituted heterocyclic group having one or two rings, each ring containing from four to seven atoms, wherein the heteroatom(s) of said heterocyclic group is 1 or 2 nitrogens; and

substituted or unsubstituted carbocyclic group that is attached to X through a carbon atom within a ring, having one or two rings, each ring containing [from] four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ alkoxy, $C_{(1-6)}$ hydroxyalkyl, hydroxyl, $C_{(1-6)}$ oxoalkyl, azido, carboxy, cyano, $C_{(2-6)}$ mono- or di-haloalkyl, isocyano, isothiocyano, [phospho, phosphono, sulfonato,]

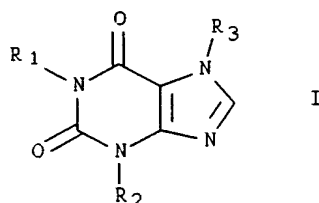
alkylphospho, alkylphosphono, alkylsulfoxy, imino, [thioalkoxyl] alkylthio, a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

6. (Three Times Amended) The compound of claim 1, wherein substituents for the substituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxy, $C_{(1-10)}$ oxoalkyl, [or $C_{(1-10)}$ acetoxyalkyl,] or heterocyclic groups [are] selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ alkoxy, $C_{(1-6)}$ hydroxyalkyl, $C_{(1-6)}$ oxoalkyl, azido, carboxy, cyano, $C_{(1-6)}$ haloalkyl, isocyano, isothiocyano, [phospho, phosphono, sulfonato,] alkylphospho, alkylphosphono, alkylsulfoxy, imino, [thioalkoxyl] alkylthio, or a chlorine, bromine fluorine and oxygen atom.

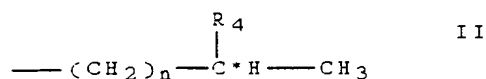
10. (Three Times Amended) The compound of claim 1, wherein the cyclic or heterocyclic is selected from the group consisting of benzyl, phenyl, biphenyl, cyclohexyl, cyclohexenyl, cyclopentyl, nicotinyl, cyclopentenyl, cyclopentanedionyl, naphthalenyl, phenolyl, quinonyl, cyclobutyl, cycloheptyl, cycloheptenyl, indanyl, indenyl, decalynyl, resorcinolyl, tetralynyl, α -tetralonyl, 1-indanonyl, cyclohexanedionyl, cyclopentanedionyl, dimethylxanthinyl, methylxanthinyl, phthalimidyl, homophthalimidyl, [methylbenzoyleneurea-moiety,] quinazolinonyl, octylcarboxamidophenyl, [N-methylbenzamido, 1-methyl-2,4-dioxotetrahydropteridyl,] glutarimidyl, piperidonyl, succinimidyl, dimethoxyphenyl, methyl dihydrouracilyl, methyluracilyl, methylthyminyl, piperidinyl, dihydroxybenzenyl, methylpurinyl, methylxanthinyl and dimethylxanthinyl.

12. (Twice Amended) The compound of claim 11, wherein the other R_s , other than =O, is selected from the group consisting of trimethoxy-substituted phenyl, [hydroxyphenyl] and [aminophenyl] phenylamino.

15. (Three Times Amended) A pharmaceutical composition comprising a pharmaceutically acceptable excipient or carrier and a compound having the following formula I:



wherein R₁ has the formula II:



R₂ and R₃ are independently C₍₁₋₁₂₎ alkyl, optionally, R₂ having one or two nonadjacent carbon atoms of the C₍₁₋₁₂₎ alkyl being replaced by an oxygen atom; and wherein:

C* is a chiral carbon atom;

n is four;

R₄ is a naturally occurring amino acid or carbohydrate moiety attached by an oxygen atom to the chiral carbon atom C* by an ester linkage, -O-X-(R₅)₂, or -O-X-(R₅)_m; m being two or three and X being selected from the group consisting of C, P or S; wherein [: R₅] R₇ is a member independently selected from the group consisting of Group Q, hydrogen and dimethylamino, wherein when one R₇ is dimethylamino, the other R₇ is =O, n is 4, X is C and R₂ and R₃ are both methyl, and wherein R₅ is a member independently selected from Group Q, and

Group Q consists of:

[hydrogen atom, wherein no more than two R₅s are hydrogen;]
hydroxyl group;
=O;

dimethylamino, wherein, when one R_5 or R_7 is dimethylamino, m and z are two, the other R_5 or R_7 is =O, n is 4, X is C and R_2 and R_3 are both methyl;

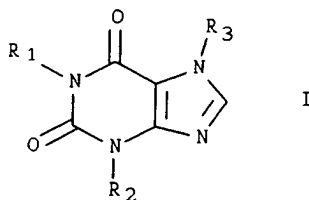
substituted or unsubstituted $C_{(3-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxy, $C_{(1-10)}$ oxoalkyl, [or $C_{(1-10)}$ acetoxyalkyl,] $C_{(1-10)}$ carboxyalkyl, $C_{(1-10)}$ hydroxyalkyl, or substituted $C_{(1-2)}$ alkyl group;

-OR₆, R₆ being a substituted or unsubstituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, or $C_{(1-10)}$ oxoalkyl;

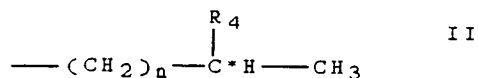
substituted or unsubstituted heterocyclic group that is attached to X through a carbon atom within a ring, having one or two rings, each ring containing [from] four to seven atoms, wherein the heteroatom(s) of said heterocyclic group is 1 or 2 nitrogens; and

substituted or unsubstituted carbocyclic group, having one or two rings, each ring containing from four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ alkoxy, $C_{(1-6)}$ hydroxyalkyl, hydroxyl, $C_{(1-6)}$ oxoalkyl, azido, carboxy, cyano, $C_{(2-6)}$ mono- or di-haloalkyl, isocyano, isothiocyano, [phospho, phosphono, sulfonato,] alkylphospho, alkylphosphono, alkylsulfoxy, imino, [thioalkoxy] alkylthio, a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

20. (Twice Amended) A compound of formula I:



wherein [one of] R_1 or R_2 has the formula II:



R_1 or R_2 , which is other than formula II, and R_3 are independently $\text{C}_{(1-12)}$ alkyl, optionally, R_2 having one or two nonadjacent carbon atoms of the $\text{C}_{(1-12)}$ alkyl being replaced by an oxygen atom; and wherein:

C^* is a chiral carbon atom;

n is four;

R_4 is a naturally occurring amino acid or carbohydrate-moiety attached by an oxygen atom to the chiral carbon atom C^* by an ester linkage, $\text{-O-X-(R}_7\text{)}_2$, or $\text{-O-X-(R}_5\text{)}_m$; m being two or three and X being selected from the group consisting of C , P or S ; wherein $[\text{: R}_5]$ R_7 is a member independently selected from the group consisting of Group Q, hydrogen and dimethylamino, wherein when one R_7 is dimethylamino, the other R_7 is $=\text{O}$, n is 4, X is C and R_2 and R_3 are both methyl, and wherein R_5 is a member independently selected from Group Q, and

Group Q consists of:

[hydrogen atom, wherein no more than two R_5 s are hydrogen;]
hydroxyl group;

$=\text{O}$;

dimethylamino, wherein, when one R_5 or R_7 is dimethylamino, m and z are two, the other R_5 or R_7 is $=\text{O}$, n is 4, X is C and R_2 and R_3 are both methyl;

substituted or unsubstituted $\text{C}_{(3-10)}$ alkyl, $\text{C}_{(2-10)}$ alkenyl, $\text{C}_{(2-10)}$ alkynyl, $\text{C}_{(1-10)}$ alkoxy, $\text{C}_{(1-10)}$ oxoalkyl, [or $\text{C}_{(1-10)}$ acetoxyalkyl,] $\text{C}_{(1-10)}$ carboxyalkyl, $\text{C}_{(1-10)}$ hydroxyalkyl, or substituted $\text{C}_{(1-2)}$ alkyl group;

-OR_6 , R_6 being a substituted or unsubstituted $\text{C}_{(1-10)}$ alkyl, $\text{C}_{(2-10)}$ alkenyl, $\text{C}_{(2-10)}$ alkynyl, or $\text{C}_{(1-10)}$ oxoalkyl;

substituted or unsubstituted heterocyclic group having one or two rings, each ring containing from four to seven atoms,

wherein the heteroatom(s) of said heterocyclic group is 1 or 2 nitrogens; and

substituted or unsubstituted carbocyclic group that is attached to X through a carbon atom within a ring, having one or two rings, each ring containing [from] four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, C₍₂₋₆₎ alkenyl, C₍₁₋₆₎ alkyl, C₍₁₋₆₎ alkoxy, C₍₁₋₆₎ hydroxyalkyl, hydroxyl, C₍₁₋₆₎ oxoalkyl, azido, carboxy, cyano, C₍₂₋₆₎ mono- or di-haloalkyl, isocyano, isothiocyano, [phospho, phosphono, sulfonato,] alkylphospho, alkylphosphono, alkylsulfoxy, imino, [thioalkoxy] alkylthio, a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

Please add the following new claims:

-- 21. A compound according to claim 1, wherein R₂ and R₃ are methyl, and wherein R₆ is a

substituted or unsubstituted C₍₁₋₁₀₎ alkyl, C₍₂₋₁₀₎ alkenyl, C₍₂₋₁₀₎ alkynyl, or C₍₁₋₁₀₎ oxoalkyl;

substituted or unsubstituted heterocyclic group having one or two rings, each ring containing from four to seven atoms, and a single nitrogen as the heteroatom; or

substituted or unsubstituted carbocyclic group that is attached to X through a carbon atom within a ring, having one ring containing four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, C₍₂₋₆₎ alkenyl, C₍₁₋₆₎ alkyl, C₍₁₋₆₎ alkoxy, C₍₁₋₆₎ hydroxyalkyl, hydroxyl, C₍₁₋₆₎ oxoalkyl, azido, carboxy, cyano, C₍₂₋₆₎ mono- or di-haloalkyl, isocyano, isothiocyano, imino, a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

22. A compound according to claim 21, wherein one R₇ is =O and wherein one R₅ is =O. --